

REMARKS

In the Office Action of February 27, 2004, claim 27 was rejected under 35 U.S.C. §112, first paragraph, and all of the claims remaining in the application were rejected as anticipated by or obvious in view of the patent to Kinoshita, 6,330,265. The cited reference and proposed amendments to the claims were discussed in a telephone interview with examiner Jackson on April 22, 2004, in which applicant's undersigned attorney and Dan Botez participated, and the courtesy of the examiner in arranging time for the interview is acknowledged with appreciation.

With regard to the rejection of claim 27 under 35 U.S.C. § 112, claim 27 has been amended herewith to delete the language "including means for blocking" and now specifies "wherein current flow is blocked through the distributed Bragg reflector gratings." As discussed in the interview, the distributed Bragg reflector gratings are by definition passive devices in which current flow must be blocked so that generation of light in the Bragg reflector gratings does not occur due to injected carriers. The amended language explicitly describes a feature that is inherent in a distributed Bragg reflector grating.

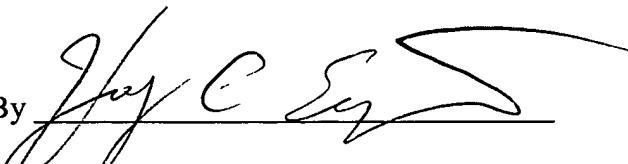
As explained by Dan Botez during the interview, the semiconductor laser of the present invention is a surface emitting laser that is capable of high power and single lobe emission of light from its surface. The distributed Bragg reflector gratings positioned at the longitudinal ends of the distributed feedback grating reflect light back longitudinally to the distributed feedback grating and allow high power emission of light through the surface to occur. The Kinoshita patent shows primarily edge emitting lasers which utilize multilayered reflectors above and below a distributed feedback grating to reflect light vertically back to the active region. While Kinoshita may show embodiments, such as those in Figs. 2a and 5, in which a small amount of light is allowed to exit through a surface of the laser, this low power surface emission is incidental to the primary goal of lowering the device threshold. There is no suggestion to incorporate applicant's distributed Bragg reflector gratings at the

ends of the distributed feedback grating to reflect light back longitudinally to the distributed feedback grating.

In the interview, a question was raised concerning the language previously used in claim 27 of "distributed Bragg reflector gratings incorporated with the epitaxial structure and adjacent to each of the longitudinal ends of the distributed feedback grating" as to whether this could be interpreted to read on the reflectors of Kinoshita which are above and below the distributed feedback grating. To clarify the language of the claim and the position of the distributed Bragg reflector gratings, claim 27 has been amended herewith to specify that the distributed Bragg reflector gratings are incorporated with the epitaxial structure and positioned only at the longitudinal ends of the distributed Bragg reflector gratings.

It was indicated in the interview that these amendments to the claims should overcome the objections raised in the last Office Action and it is believed that all of the claims remaining in the application should be in condition for allowance. The examiner is invited to contact applicant's undersigned attorney by telephone if there are any further questions or comments concerning the language of the claims as amended.

Respectfully submitted,

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